PalmPower Magazine Enterprise Edition
http://www.palmpowerenterprise.com   July 2001

PALM IN THE REAL WORLD

Wireless Palm handhelds provide animal control officers with information access

By Megan Obrist

Animal control officers in Lincoln, Nebraska are dispatched just like police officers and fire fighters to investigate situations such as a citizen reporting a dog bite or an animal in danger, as well as to ensure citizens have animal licenses for their pets. As animal control is part of the health department, one of its responsibilities is to control rabies. As such, officers are required to go door-to-door to individuals' homes, urging residents to renew delinquent animal licenses.

Animal control officers are mobile workers, constantly on the go, and without access to a computer system. When they needed information on a particular animal, officers had to go to the office and print separate pages of information on the animal in question, including the animal's tag number, the owner's name, and the address of the owner.

To improve the organization's efficiency, the City of Lincoln deployed wireless Palm VIIx handheld computers (at http://www.palm.com/products/palmviix/) and Kodak PalmPix digital camera attachments (at http://www.kodak.com/US/en/digital/cameras/palmPix/
a variety of information, including:

- Animal and owner information by tag number, owner name, and owner address;
- Unit dispatching information;
- City municipal codes pertaining to animal ordinances;
- Property owner information;
- License plate lookup.

The problem with print-outs

The old process of printing out pertinent information at the office and carrying it around on the job was not only a time-intensive and costly effort, but also the information proved out of date almost as soon as it was printed, causing confusion among officers and citizens alike. Often, an officer would show the papers to a citizen, explaining that they needed to renew the license, but in reality, the citizen had already renewed and just didn't have the new tags with them.

Another problem arose at night. The City of Lincoln doesn't assign animal control officers to 24-hour-a-day patrol shifts. In many cases, an on-call officer is at home and dispatched in a way similar to that of a police officer or fire fighter. In order for the officer to retrieve information about an animal, he or she would have to go to the health department, sign onto a terminal, look up the necessary information, print the information, and then respond to the call. This was an extremely and unnecessarily lengthy process. The City of Lincoln realized it needed to change the system to benefit its employees and its citizens.

Going wireless

To solve the problem, the city developed a Web-clipping application, pictured in Figure A, to run on the handheld devices.

FIGURE A

The Animal Control application allows Lincoln's animal control officers to be always up to date.

An IBM mainframe computer provides the robust back end and hosts the city's Web server. Government officials can now wirelessly access the city's animal control database from any location. Further, the total system includes a portal (at http://www.ci.lincoln.ne.us
guide including building permit searches, accident report look up, and property tax assessment.

The PalmPix digital camera is used as part of the total solution. The device snaps onto the handheld computer, enabling animal control officers to take digital pictures as documentation of animal and health violations. This ability assists the City's legal department, enabling them to take action against violators as appropriate.

Benefits to the agency

The wireless, Web-based system allows the City of Lincoln to utilize its current network infrastructure and existing application software solutions. Each time the city Web enables an application, it can include a routine that detects the device type requesting the information and can format the output accordingly, all within the same program. When the city creates the applications, it automatically embeds the ability to deliver information to fit either normal browser requests or handheld computing devices.

The ability to grow the user base and not affect the existing wide area network is of tremendous benefit to the city. Because the mainframe system and the handheld devices complement each other, the system allows the city to grow the number of concurrent users indefinitely. The handheld system enables the city to leverage its authority to grant right-of-way access to additional towers, if desired, to expand the signal strength and range of the local Palm wireless network.

Another benefit of using the wireless handheld devices is that they allow the officers to eliminate excess paperwork and become truly mobile workers, responding much faster to calls. The new system provides mobile employees with the ability and freedom to stay in the field, responding to citizens' needs, instead of continually returning to an office desktop PC to retrieve information.

Because the wireless handheld program has proven such a success within the animal control unit, the City of Lincoln is now providing all departments the added benefits of retrieving decision-making information remotely, including email capabilities, via handhelds. Now, animal control, police, fire, sheriff, weed control, and other government agencies share channels on the dispatching system, truly connecting all public safety components in their city.

The City of Lincoln is committed to the deployment of a truly mobile workforce, utilizing wireless Web technology and applications to serve the citizens in the most efficient and cost effective manner, as demonstrated by its use of Palm handheld devices and a Web-based, back-end server.

Product availability and resources

For a demonstration of the City of Lincoln Animal Control's Wireless Web Application, visit http://www.ci.lincoln.ne.us/city/health/animal/viewlet/palmtest.htm.

For more information on Palm VIIx handheld computers, visit http://www.palm.com/products/palmviix/.

For more information on Kodak PalmPix digital camera attachments, visit http://www.kodak.com/US/en/digital/cameras/palmPix/.

For the City of Lincoln's government services guide portal, visit http://www.ci.lincoln.ne.us.

For more information about Palm computers, visit http://www.palm.com.

Bulk reprints

Bulk reprints of this article (in quantities of 100 or more) are available for a fee from Reprint Services, a ZATZ business partner. Contact them at reprints@zatz.com or by calling 1-800-217-7874.

Megan Obrist is an account executive with O'Keeffe & Company, a full-service marketing communications firm focused on delivering results for leading business-to-business and business-to-government IT&T clients. For more information on O'Keeffe & Company, please visit http://www.okeeffeco.com.

Discuss this article on the PowerBoards.